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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,231	12/31/2003	John D. Willems JR.	2003-085-TAP / STK 03085	8903
51344 7590 05/07/2007 BROOKS KUSHMAN P.C. / SUN / STK 1000 TOWN CENTER, TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER CHEN, TIANJIE	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 05/07/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/750,231

Applicant(s)

WILLEMS ET AL.

Examiner

Tianjie Chen

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☒ Claim(s) 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Final Rejection

Election/Restrictions

1. Applicant submitted evidence is persuasive, restriction on claims 19 and 20 is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsuchiya (US 7,072,139).

Claim 15, Tsuchiya shows a load and unload apparatus in Figs. 1-5, for diverting an impact force applied to the load and unload apparatus, including:

a shuttle 2 (Fig. 3(a)) having a cavity configured to accept a storage medium, and at least one pin 2-2 extending from the shuttle;

an elevator mechanism (Fig. 1(b)) for reciprocally elevating and lowering the shuttle with a slot that receives the at least one pin; and

an impact diversion mechanism (2-5, 2-7, 5, 4-3, 6, and etc. in Figs. 3(a) and 5; column 6, lines 32-38) for diverting an impact force resulting from insertion of the storage medium into the cavity in the shuttle,

Art Unit: 2627

wherein the impact diversion mechanism diverts the impact force to a side surface 2b or 2c through spring 5) of the shuttle instead of the at least one pin 2-1.

Claim 16, Tsuchiya further shows that the impact diversion mechanism comprises a protrusion 25 extending from the side surface and a flange 2e located within the apparatus.

Claim 17, Tsuchiya further shows that the impact diversion mechanism comprises a flange 2e located on a fixed side plate 2c of the apparatus.

Claim 18, Tsuchiya further shows that the impact diversion mechanism further comprises a protrusion 2-5 extending from the side surface of the shuttle that is brought into abutment with the flange 2e on application of the impact force to the shuttle.

Claim 19, Tsuchiya further shows that the at least one pin 2-1 extends from the side surface and the slot 13-1 (Fig. 1(b)) has a tapered width at lower end, and wherein the at least one pin 2-1 is engaged with the slot at a first position in the slot having a first width when the shuttle is located in an unloaded position for reception of the storage medium.

Claim 20, Tsuchiya further shows that the shuttle is reciprocally displaceable from the unloaded position to a loaded position, wherein the at least one pin is engaged with the slot at a second position in the slot having a second width when the shuttle is located in the loaded position, the first width greater than the second width.

Allowable Subject Matter

3. Claims 1-14 are allowed.

The following is an examiner's statement of reasons for allowance:

Art Unit: 2627

- With regard to independent claim 1, as an exemplary reference, Ando et al (US 4,831,472) shows a storage medium load and unload apparatus for diverting a storage medium insertion impact force, comprising: a shuttle having a first pin with a first radius extending from a side surface of the shuttle and a protrusion having a posterior edge extending from the side surface, wherein the posterior edge is displaced a first distance from a center of the first pin; and a fixed side plate having a flange with a vertical edge and a first slot with which the first pin is engaged has an anterior edge and a curved posterior edge with a first width between the anterior edge and the curved posterior edge, wherein the vertical edge of the flange is displaced a second distance from the anterior edge of the first slot; **but fails to show** that the first slot has a curved posterior edge, and wherein a sum of the first width and the second distance is greater than the sum of the first distance and the first radius.
- Applicant asserts: in this invention "A protrusion extending from a shuttle side surface is positioned to impact a flange of a fixed side plate of the apparatus such that the impact force resulting from insertion of a storage medium into the shuttle is conveyed to the protrusion and the flange (Specification, p. 19).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

4. Applicant's arguments with respect to claim 15 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the slot 46 is tapered. Follow Applicant's argument, slot 13-1 in Tsuchiya should have a tapered width.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

Art Unit: 2627

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


TIANJIE CHEN
PRIMARY EXAMINER